Public Consultation on the reformation of CITA (Copenhagen Interbank Tomorrow/Next Average)

1. Introduction and invitation to comment

This report is the first deliverable by the Risk-Free Rate Working Group under Finance Denmark regarding a CITA-reform to ensure the continuation of this forward-looking term reference rate after the introduction of DESTR¹.

The report focuses on making a recommendation on the preferred transition model for the current CITA² (hereafter "CITA" or "current CITA") into a new or a reformed CITA with DESTR as the variable leg (hereafter "new CITA" or "reformed CITA").

The background for the transition is the introduction of DESTR and the fixing of the existing Tom/Next reference rate to DESTR plus a spread as per 4 April 2022 followed by the cessation of the Tom/Next rate by 1 January 2026.

This report and the results of the consultation are intended to serve as a guide to DFBF (Danish Financial Benchmark Facility) who, in line with their policy, will launch a subsequent consultation(s) in due course.

Stakeholders are hereby invited to comment on all matters in this report and on the questions summarized in Appendix 1.

Comments are most helpful if they:

- Respond to the question stated
- Indicate the specific question to which the comment relates
- Contain a clear rationale
- Describe any alternatives the RFR Working Group should consider

The RFR Working Group will consider all comments received by latest 23 March 2022 COB. An anonymized summary of the comments and the final recommendation from the Working Group will be published shortly thereafter.

All contributions should be submitted via email to mof@fida.dk.



FINANCE DENMARK

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March 3, 2022 Doc: FIDA-1344658213-687916-v1 Contact Morten Frederiksen

¹ Terms of Reference for the Working Group on forward-looking term rates based on DESTR and fallback for CIBOR (finansdanmark.dk)

 $^{^{\}rm 2}$ based on Overnight Index Swaps with the Tom/Next as the variable leg.

2. Background

In November 2020, Danmarks Nationalbank assumed responsibility for the new reference rate Denmark Short-Term Rate, DESTR. Reference rates are used in a wide range of financial contracts, including loans, mortgage bonds and interest-rate swaps. Thus, it is important for the financial system in Denmark that a short-term transaction-based reference rate is introduced in Danish kroner in line with international standards.

Danmarks Nationalbank starts publishing DESTR on 4 April 2022. The first publication will reflect trading activity on 1 April 2022.

It has been recommended by the working group on Short-Term References Rates within Danmarks Nationalbank³ that the existing Tom/Next rate (published today by DFBF) will be fixed to DESTR plus a spread and will cease by 1 January 2026. The spread will be determined by DFBF, in concert with Danmarks Nationalbank, and will be announced by 25 March at latest and be applicable from 4 April 2022 (hereafter "Spread").

This was followed by a public consultation and statement from DFBF, where it was concluded that DFBF as per 4 April 2022 will adjust the methodology of Tom/Next to be DESTR plus the Spread. Furthermore, DFBF will continue to publish Tom/Next every good business day until 1 January 2026, the date on which Tom/Next will be discontinued⁴.

The working group on Short-Term References Rates within Danmarks Nationalbank⁵ furthermore encourages Finance Denmark to continue the work to analyze and recommend a transition model and timeline for the transition of the current CITA into a new benchmark or a reformed CITA benchmark with DESTR as the variable leg. The transition should follow the establishment of a market in DESTR-based Overnight Index Swaps (hereafter "DESTR OIS") as also envisaged in the Public Consultation.

In the memo from the RFR Working Group under Finance Denmark dated 8 July 2021⁶ it was concluded that there will be a need for forward- as well as back-ward-looking reference-rates in the Danish market.

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⁴ <u>https://dfbf.dk/consultation-on-tom-next-transition-concluded/</u>

⁵ <u>https://www.nationalbanken.dk/da/markedsinfo/transaktionsbaseret_referencerente/Sider/Konsulta-tion-overgangen-fra-TomNext-til-DESTR.aspx</u>

⁶ https://finansdanmark.dk/media/47854/memo-on-the-potential-use-of-forward-and-backward-looking-reference-rates-in-the-danish-market-after-destr.pdf

The RFR Working Group has recommended that Danmarks Nationalbank as the administrator for DESTR publishes the relevant backward looking compounded indexes for DESTR. Danmarks Nationalbank has announced⁷ that they will publish a compounded DESTR index beginning on 4 April 2022. The index will ensure the possibility of calculating compounded average rates for all periods. A similar index is published by other central banks as well.

This leaves the task of the CITA-transition to ensure the continuation of forwardlooking term reference rates after the introduction of DESTR. On that background Finance Denmark has given the RFR Working Group with reference to the Money Market Committee the task of making recommendations on the future of CITA.

The RFR Working Group comprise of senior officials with relevant expertise from Danish banks and mortgage institutions. Representatives from Danmarks Nationalbank and DFBF participates as observers and Finance Denmark provides Secretariat.

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⁷ https://www.nationalbanken.dk/en/pressroom/Pages/2021/11/DNN202121425.aspx



3. The use of CITA in the financial markets

Unlike most other international rates markets, the DKK market is characterized by having an established OIS reference rate, CITA. The CITA rate is defined as the interest rate swap offered rate quoted for the day-today rate (T/N) against a fixed DKK rate for the following maturities - 1 month, 2 months, 3 months, 6 months, 9 months and 12 months. This implies that the fixed DKK rate expresses the expected average for the day-to-day rate (T/N) for the specified maturities.

Thus, an official forward-looking OIS term structure is already in place and used in the bond and loan markets. This implies that a transition of Tom/Next to DESTR has direct implications for term reference rates in Denmark.

The consultation document from the working group on Short-Term References Rates within Danmarks Nationalbank⁸ includes a section (section 5) on the use of Tom/Next and CITA in financial markets. Here it is concluded that bank loans referencing CITA are very modest with volumes around kr. 7 billion distributed across approximately 8,500 loans, primarily to households.

In contrast, the mortgage bond market relies heavily on CITA for floating-rate bonds used to fund lending to both household and business customers. All currently outstanding mortgage bonds will expire before 1 January 2026 whereas the underlying mortgage loans represent long-dated commitments up to 30 years.

Regarding the derivatives market most DKK derivatives (interest rate swaps, forward rate agreements and cross currency basis swaps) are linked to CIBOR (3M and 6M). However, an OIS market is also well functioning and liquid in terms of the CITA swap with standard tenors from one month to five years with the Tom/Next as the floating reference rate. Due to the close correlation with Danmarks Nationalbank's key interest rates, CITA swaps are used by market participants to manage exposures to these rates. Moreover, market participants use CITA swaps as input for pricing and hedging of short-term bonds and other financial instruments.

In the Public Consultation, it is also described that there are a limited outstanding number of CITA swaps beyond the five-year tenor. The majority of the existing CITA swaps can therefore smoothly mature before the cessation of Tom/Next in

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⁸ <u>https://www.nationalbanken.dk/da/markedsinfo/transaktionsbaseret_referencerente/Sider/Konsulta-</u> tion-om-overgangen-fra-TomNext-til-DESTR.aspx

2026. Furthermore it is concluded in The Public Consultation⁹ that there are no OIS-swaps with reference to CITA, and that the CITA swaps use the Tom/Next as the floating reference rate.

For all products mentioned above, a smooth and orderly transition model for CITA is essential.

Question 1

Do you see other important product types or exposures referencing or linked to CITA, which should be considered in the transition as described below?

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⁹ <u>https://www.nationalbanken.dk/da/markedsinfo/transaktionsbaseret_referencerente/Sider/Konsulta-tion-ow-overgangen-fra-TomNext-til-DESTR.aspx</u>



4. Recommendations on a transition model for CITA

The introduction of DESTR has received dedicated support from the Danish financial sector, including the Danish Financial Supervisory Authority¹⁰. With broad support for DESTR as the preferred short-term reference rate the RFR Working Group finds it natural to initiate a transition of CITA from a Tom/Next to a DESTR based OIS reference rate.

The RFR Working Group finds that a transition approach for the new or reformed CITA should secure:

- The well-established market for a DKK based OIS reference rate should be maintained after the transition
- The transition should be transparent and easy to understand for market participants
- The transition should minimize uncertainty across the financial markets
- The transition should require a minimal use of resources for market participants

Transition approaches

For the Danish CITA transition, the RFR Working Group has considered two transition paths:

- 1. Parallel run approach
- 2. Reformation approach

Both approaches will lead to a DESTR based DKK OIS reference rate at a given point in time.

Parallel run approach

A parallel run implies that a new CITA reference rate will be established as soon as market liquidity for DESTR OIS has built up. This approach would imply a pure market-led transition with the current CITA and new CITA running in parallel.

The defining feature of the parallel run is that the current CITA would continue as it is today until the cessation date for Tom/Next. The new CITA would still be administered by DFBF, and panel banks would continue to submit daily input data, based on market quotes.

There would be simultaneous independent operations of current CITA and new CITA discounting with counterparties and at CCPs. One benefit of the parallel run

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¹⁰ <u>https://www.finanstilsynet.dk/Nyheder-og-Presse/Pressemeddelelser/2021/TN_renten_091121</u>

approach is that no changes will have to be made to existing contracts referring to CITA. Markets would merely have the new CITA as a new DKK OIS reference rate based on DESTR.

The parallel run approach would give market participants time to develop a DESTR liquidity pool alongside a Tom/Next liquidity pool and to shift their exposures from current CITA to new CITA before the cessation date. Market participants would also have full freedom not to use the new CITA rate at all. However, with the catch that the current CITA will be unavailable when Tom/Next is ceased in 2026.

A disadvantage with the parallel run approach is most likely that liquidity would be dispersed between current CITA- and new CITA-linked products during the transition period, making both markets suffer from a lack of liquidity. A parallel run approach therefore has the risk of diluting market liquidity and making the transition to DESTR in the Danish market more difficult. A parallel run approach may not give the necessary incentives to shift to new CITA-linked products and thereby prolong the transition process similar to what has been observed for the EONIA to €STR-transition.

Additional challenges could arise from having to explain to clients and customers the difference between the two reference rates and the related products. Further a parallel run will require additional resources to product- and system development within the banking sector in order to maintain two comparable reference rates.

Reformation approach

Under the Reformation approach, the CITA methodology would be changed by DFBF in accordance with its Consultation Policy¹¹ and during a transition period to become linked to DESTR OIS instead of Tom/Next OIS. Since Tom/Next is already fixed to DESTR from 4 April 2022 the only difference between DESTR and Tom/Next will be the Spread.

A reformation approach is a natural continuation of the transition applied to Tom/Next as CITA is simply reformed to reflect the changes introduced to the underlying floating leg. Further, it ensures continuity, since the reformed CITA can continue to be used in existing and new contracts. This is especially important for the mortgage bond market which relies heavily on CITA for floating-rate bonds used to fund long-term lending to both household and business customers.

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¹¹ https://dfbf.dk/wp-content/uploads/2020/10/DFBF17018-Consultation-Policy.pdf

The Reformation approach will also ensure that the market liquidity would not be dispersed between CITA- and new CITA-linked products during the transition period, making both markets suffer from a lack of liquidity.

Further a reformation will not require the launch of a new reference rate and therefore it will not require product- and system development within the banking sector.

A limited number of mortgage bonds to be issued during the transition period with maturity date crossing 1 January 2026 will have a coupon shift, equal to the Spread (as determined at latest by 25 March 2022). The RFR Working Group finds that the risk premium related to this coupon shift is limited/zero, since the coupon shift is known in advance and relating to short/medium term bonds (typically 2½-3 years).

The RFR Working Group's preferred transition approach

Based on the criteria listed in the beginning of this section, the RFR Working Group sees the strongest case for recommending the Reformation approach as it effectively ensures a smooth transition process for long dated CITA-related products to be linked to DESTR.

Question 2

Do you agree with the recommendation to follow a Reformation approach, whereby the reformed CITA continues under a changed definition with a link to OIS DESTR?

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The preferred transition model for CITA in more detail

The RFR Working Group recommends the Reformation approach where the CITA methodology is changed in two sequences to track the transition of Tom/Next to DESTR. The recommended sequences are described in detail below.

Sequence 1

This includes an interim definition where the CITA methodology is changed on [1 February 2023]¹², so the panel banks submissions are now based on DESTR OIS plus the Spread to be added by DFBF.

CITA will under the interim definition be the same rate as the current definition given that Tom/Next is linked to DESTR with the Spread. It only changes the panel banks CITA-submissions to be based on DESTR OIS and DFBF to add the Spread.

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Sequence 2

As per 1 January 2026, the CITA methodology is changed. The panel banks submissions are still based on DESTR OIS, but DFBF will not add the Spread. The reference rate will consequently on 1 January 2026 be reduced (fall) with the Spread (all other things being equal).

The suggested transition could be implemented in DFBF's CITA Calculation Methodology by changing the CITA definition to the following during the transition period:

"CITA being the interest rate swap offered rate quoted for the day-today rate (T/N until [1 February 2023]. Hereafter DESTR plus Spread until 1 January 2026. Hereafter DESTR) against a fixed DKK rate for the following maturities - 1 month, 2 months, 3 months, 6 months, 9 months and 12 months' maturity."¹³

The interim definition where the CITA methodology is changed on [1 February 2023] will be in line with the recommendation in the Public Consultation where market participants are recommended to refrain from entering new Tom/Next-related contracts from 1 April 2023.

The Reformation approach will ensure that the CITA reference rate will continue and that other parts of the DFBF methodology and definitions will be unchanged (unless otherwise decided by DFBF, see also section 5), including panel banks submissions still to be based on market quotes. The change after the transition

 $^{^{\}rm 13}$ Change of definition is an example. DFBF may decide another wording. Tenors may also be revised – see section 5



¹² To be decided, see question 4

period is that the reformed CITA is linked towards the DESTR OIS (instead of T/N OIS) from 1 January 2026.

It is considered to smoothen the process that CITA in the interim period is defined against DESTR plus the Spread.

The RFR Working Group suggests that the CITA methodology is changed by DFBF during Q4 2022 in accordance with its Consultation Policy.

To support the transition the RFR Working Group recommends that a DESTR OIS market maker agreement is established in Q4 2022 between Finance Denmark's members active in the DKK money market.

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Question 3

Do you agree with the recommendation that CITA is reformed in 2 sequences – first an interim definition, where CITA is defined as the panel banks DESTR OIS submissions plus the Spread, and a final definition, where CITA is the panel banks DESTR OIS submissions (without the Spread)?

Question 4

Do you agree that the change to the interim definition of CITA could take effect 1 February 2023 (subject to DFBF approval and consultation process) and that the final definition takes effect on 1 January 2026 equal to the Tom/Next cessation date?



5. Tenors for CITA

The tenors for CITA are currently 1 month, 2 months, 3 months, 6 months, 9 months and 12 months.

The RFR Working Group has discussed the use of the different tenors and has compared the current CITA tenors with tenors for international RFR Term Benchmarks. As a comparison, the Refinitiv Term SONIA and CME Term SOFR benchmarks have the following tenors: 1 month, 3 month, 6 month and 12 month.

Question 5

Do you think it would be beneficial to cease the 2- and 9-month tenors to aling with international RFR Term Benchmarks?

6. Naming for CITA

CITA is an abbreviation for Copenhagen Interbank Tomorrow/Next Average and the name will therefore not reflect the underlying instrument after 1 January 2026.

However, CITA is also a well-established brand in the market and used broadly in existing long-term contracts. Furthermore, the RFR Working Group believes that an unchanged name unnecessarily affects the legal basis of existing contacts. The RFR Working Group recommends on this basis not to change the naming for CITA.

Question 6

Do you agree that CITA should continue with the same name? Do you see other arguments in favor of a changed or unchanged naming for CITA?

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7. Legal considerations and potential contractual issues

The RFR Working Group cannot give advice to DFBF about the legal implications of the recommended change to the definition of CITA and any other changes. Nor can the RFR Working Group give legal advice to users of CITA such as banks or their customers about the legal implications in a contractual relationship where CITA is used and where the definition behind CITA is changed by DFBF.

However, article 28(1) of BMR (Benchmark Regulation) is dealing with changes to and cessations of benchmarks. This article says that "an administrator shall publish..... a written procedure concerning the actions to be taken by the administrator in the event of changes to or the cessation of a benchmark.....".

The DFBF Consultation Policy¹⁴ covers a material change and is considered to be relevant in case of the recommended Reformation approach (whereas the DFBF Transition Policy would cover a cessation in case of a parallel run approach).

In the opinion of the RFR Working Group, the above will serve as a strong basis for DFBF's decision to change the definition subject to DFBF's own approval and hearing process as set out in the Consultation Policy.

The Working Group considers specifically that short dated (existing as well as new) contracts with maturity before 1 January 2026 should be unaffected by the recommended reformation. The same applies for new contracts entered into force after 1 January 2026.

Stakeholders are encouraged to take necessary actions in respect of existing and new long dated contracts with maturity beyond 1 January 2026. Existing clauses regarding fallback and material change of the reference rate should be reviewed and changed if necessary. It could include update of loan agreements, base prospectuses, derivative-documentation etc. The specific contract may or may not include language about spread adjustment for the shift of level of interest as per 1 January 2026, from which date the reformed CITA is recommended to be linked to DESTR.

Existing contracts with a maturity beyond 1 January 2026 referring to CITA may have terms and fallback clauses that do not allow for a change of definition for CITA. It will be for the contractual parties to make an assessment, and the parties may, of course, try to renegotiate the contract.

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¹⁴ https://dfbf.dk/wp-content/uploads/2020/10/DFBF17018-Consultation-Policy.pdf

The RFR Working Group is not aware of any contracts with potential issues, would like to receive inputs from the stakeholders.

Question 7

Do you have contracts with no or insufficient fallback/material change language referencing or linked to CITA (tough legacy contracts)? And do you see a need for a sector recommendation in this respect? Would any reference to international recommendations on Credit Spread Adjustment be helpful?

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8. Executive summary

The purpose of this report by the RFR Working Group under Finance Denmark has been to make a recommendation on a CITA-reform to ensure the continuation of this forward-looking term reference rate in Denmark.

To summarize, the RFR Working Group recommends the following reformation for CITA:

- The CITA methodology will be changed on [1 February 2023], so that panel banks submissions are based on DESTR OIS plus the Spread (between Tom/Next and DESTR as determined by DFBF/Danmarks Nationalbank by latest 25 March 2022).
- After 1 January 2026, the CITA methodology is changed in a final step so that panel banks submissions are still based on DESTR OIS, but without the Spread. The reference rate will consequently be reduced (fall) with the Spread

The RFR Working Group recommends DFBF to change the CITA methodology in Q4 2022 in accordance with its Consultation Policy.

To support the transition the RFR Working Group further recommends that a DESTR OIS market maker agreement is established in Q4 2022 between Finance Denmark's members active in the DKK money market.

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Appendix

Overview of questions for the consultation.

Question 1

Do you see other important product types or exposures referencing or linked to CITA, which should be considered in the transition as described below?

Question 2

Do you agree with the recommendation to follow a reformation approach, whereby CITA continues under a changed definition with a link to OIS DESTR?

Question 3

Do you agree with the recommendation that CITA is reformed in 2 sequences – first an interim definition, where CITA is defined as the panel banks DESTR OIS submissions plus a Spread, and a final definition, where CITA is the panel banks DESTR OIS submissions (without the Spread)?

Question 4

Do you agree that the change to the interim definition of CITA could take effect 1 February 2023 (subject to DFBF approval and consultation process) and that the final definition takes effect on 1 January 2026 equal to the Tom/Next cessation date?

Question 5

Do you think it would be beneficial to cease the 2- and 9-month tenors to aling with international RFR Term Benchmarks?

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Do you agree that CITA should continue with the same name? Do you see other arguments in favor of a changed or unchanged naming for CITA?

Question 7

Do you have contracts with no or insufficient fallback language referencing or linked to CITA (tough legacy contracts)? And do you see a need for a sector recommendation in this respect? Would any reference to international recommendations on Credit Spread Adjustment be helpful?

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